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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,291	10/03/2005	Ju-Ock Nam	012679-113	6194

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

BRADLEY, CHRISTINA

ART UNIT	PAPER NUMBER
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1654

MAIL DATE	DELIVERY MODE
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08/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/552,291	NAM ET AL.
	Examiner	Art Unit
	Christina Marchetti Bradley	1654

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 June 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 4-8 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1 and 4-6 is/are allowed.
 6) Claim(s) 7 and 8 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 12 June 2007 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/17/2007</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. Claims 1 and 4-8 are pending; claims 2, 3 and 9-12 were cancelled by Applicant in the response filed 6/12/2007.

Drawings

2. The drawings received on 6/12/2007 are acceptable. The objection to Figures 3d, 7a, 7b, 8a and 8b is withdrawn.

Sequence Compliance

3. The drawings received on 6/12/2007 are acceptable and are in compliance with MPEP § 2421-2422. The objection to Figures 1, 4b, and 5 is withdrawn.

Information Disclosure Statement

4. The non-patent literature reference Kim *et al.* cited on the information disclosure statement filed 7/17/2007 was not considered in accordance with 37 CFR 1.98(a)(2), which requires a legible copy of each cited non-patent literature publication or that portion which caused it to be listed. There are pages listed from the reference.

Claim Rejections - 35 USC § 112/101

5. The rejection of claims 11 and 12 is moot because the claims are cancelled.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. The rejection of claims 1 and 4-8 with respect to the written description provision of 35 U.S.C. 112, first paragraph, is withdrawn in light of the amendment to the claims filed 6/12/2007. The rejection of claim 2 and 9-12 is moot because the claims are cancelled.

Claims 7 and 8 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating cancer, vascular malformation, arteriosclerosis, vascular adhesions, edematous sclerosis, corneal graft neovascularization, neovascular glaucoma, diabetic retinopathy, pterygium, retinal degeneration, retrolental fibroplasia, granular conjunctivitis, rheumatoid arthritis, systemic Lupus erythematosus, thyroiditis, psoriasis, pyogenic granuloma, seborrheic dermatitis and acne, does not reasonably provide enablement for treating capillarectasia or all other angiogenesis-related diseases. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

8. The amendment of the claims filed 6/12/2007 render moot the line of rejection regarding the scope of the peptide compositions and the prevention of angiogenesis-related diseases. Applicant's arguments on pages 10 and 11 regarding the Matrigel Plug assay, an *in vivo* assay demonstrating that the claimed peptides are effective against angiogenesis, and the declaration of Dr. Kang, are persuasive regarding the treatment of conditions such as cancer and arthritis that are known to involve angiogenesis. The rejection of claims 7 and 8 is maintained because neither the specification or the prior art provide guidance on the relationship of capillarectasia and angiogenesis. Furthermore, the specification provides insufficient guidance on how to identify conditions other than cancer, vascular malformation, arteriosclerosis, vascular adhesions, edematous sclerosis, corneal graft neovascularization, neovascular glaucoma, diabetic

retinopathy, pterygium, retinal degeneration, retrolental fibroplasia, granular conjunctivitis, rheumatoid arthritis, systemic Lupus erythematosus, thyroiditis, psoriasis, pyogenic granuloma, seborrheic dermatitis and acne that can be treated with the claimed peptides. The skilled artisan would be burdened with undue experimentation in determining if a particular disease is related to angiogenesis and then if the peptides of the claimed invention could be used to treat the disease. When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

9. The rejection of claims 10 and 11 is moot because the claims are cancelled.

Claim Rejections - 35 USC § 102

10. The rejection of claims 9 and 10 is moot because the claims are cancelled.
11. The rejection of claims 1, 7 and 8 under 35 U.S.C. 102(b) for being anticipated by Weissbach *et al.* (WO 99/46282) is withdrawn in light of the amendments to the claims filed 6/12/2007. Weissbach *et al.* do not teach a peptide with the sequence presented in amended claim 1. The rejection of claims 1, 2 and 9-12 is moot because the claims are cancelled.

Double Patenting

12. The provisional rejection of claims 1 and 4-8 as being unpatentable over claim 1-6, 8-13 and 16 of copending Application No. 11/578,463 is withdrawn in light of the amendments to the claims filed 6/12/2007. Claims 1-6, 8-13 and 16 of copending Application No. 11/578,463 do not recite the administration of a peptide with the sequence presented in amended claim 1 of the instant application. The rejection of claims 2, 3 and 9-12 is moot because the claims are cancelled.

Allowable Subject Matter

Art Unit: 1654

13. Claims 1 and 4-6 are allowed.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Marchetti Bradley whose telephone number is (571) 272-9044. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christina Marchetti Bradley, Ph.D.
Patent Examiner
Art Unit 1654

cmb



Cecilia J. Tsang

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